

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and the listing of claims in the application.

Claims Listing:

1. (Withdrawn) A transmission unit comprising:
 - an aggregation unit to aggregate in a buffer at least two small messages received from an upper layer into a packet and to provide said packet to a pending queue; and
 - a fireout unit to pass packets to a network device by selecting packets from said pending queue or said buffer depending on whether or not said pending queue is empty.
2. (Withdrawn) A unit according to claim 1 and also comprising a reception monitor to indicate to fireout unit the status of reception of said packets.
3. (Withdrawn) A unit according to claim 1 and wherein said fireout unit operates at a rate related to network congestion.
4. (Withdrawn) A unit according to claim 3 and wherein said network congestion may be any one of the following: transmitter congestion, receiver congestion and congestion of network elements.
5. (Withdrawn) A transmission unit comprising:
 - a transmitting network device;
 - means for adjusting the size of aggregated packets produced by said network device based at least on network congestion.
6. (Withdrawn) A transmission unit according to claim 5 and wherein said means for adjusting comprises:
 - an aggregation unit to aggregate in a buffer at least two small messages received from an upper layer into a packet and to provide said packet to a pending queue; and

a fireout unit to pass packets to a network drive, selecting them from said pending queue or said buffer depending on whether or not said pending queue is empty.

7. (Withdrawn) A unit according to claim 6 and also comprising a reception monitor to indicate to fireout unit the status of reception of said packets.

8. (Withdrawn) A unit according to claim 5 and wherein said network congestion may be any one of the following: transmitter congestion, receiver congestion and congestion of network elements.

9. (Withdrawn) A software product comprising:

a computer usable medium having computer readable program code means embodied therein for causing transmission of packets to a network, the computer readable program code means in said software product comprising:

computer readable program code means for causing a computer to aggregate in a buffer at least two small messages received from an upper layer into a packet and to provide said packet to a pending queue; and

computer readable program code means for causing the computer to pass packets to a network drive, selecting them from said pending queue or said buffer depending on whether or not said pending queue is empty.

10. (Withdrawn) A product according to claim 9 and also comprising code means for causing a computer to indicate to said second code means the status of reception of said packets.

11. (Withdrawn) A product according to claim 9 and wherein said second code means operates at a rate related to network congestion.

12. (Withdrawn) A product according to claim 12 and wherein said network congestion may be any one of the following: transmitter congestion, receiver congestion and congestion of network elements.

13. (Currently Amended) A method for a transmitting network device to minimally delay transmission of short messages, the method comprising:

adjusting the size of aggregated data packets based at least on the congestion of a said transmitting network device, and

transmitting partially aggregated data packets when said transmitting network device has no fully aggregated packets waiting to be transmitted.

14. (Previously Presented) A method according to claim 13 and wherein said adjusting comprises:

aggregating in a buffer at least two small messages received from an upper layer into a packet;

providing fully aggregated packets from said buffer to a pending queue;

selecting fully aggregated packets from said pending queue or partially aggregated packets from said buffer depending on whether or not said pending queue is empty; and

passing said selected packets to said network device.

15. (Previously Presented) A method according to claim 14 and also comprising indicating a reception status for said packets.

16. (Original) A method according to claim 14 and wherein said passing operates at a rate related to network congestion.

17. (Previously Presented) A method according to claim 16 and wherein said activity of said network device is affected by any one of the following: transmitter congestion, receiver congestion and congestion of network elements.

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18. (Currently Amended) A method for a transmitting network device to minimally delay transmission of short messages, the method comprising:

aggregating in a buffer at least two small messages received from an upper layer of said transmitting network device into a packet;

providing fully aggregated packets from said buffer to a pending queue;

selecting fully aggregated packets from said pending queue or partially aggregated packets from said buffer depending on whether or not said pending queue is empty; and

passing said selected packets to a network interface device for transmission.

19. (Previously Presented) A method according to claim 18 and also comprising indicating a reception status for said packets.

20. (Canceled) A method according to claim 18 and wherein said passing operates at a rate related to network congestion.

21. (Previously Presented) A method according to claim 18 and wherein said activity of said network device is affected by any one of the following: transmitter congestion, receiver congestion and congestion of network elements.